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Nebraska Timber Industry—An Assessment of Timber Product Output and Use, 2000

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FOREWORD

This bulletin reports findings of a survey of all primary wood-using mills in Nebraska in 2000 and details the industry's size and composition, its use of roundwood, and its generation and disposition of wood residues. Such detailed information is necessary for intelligent planning and decisionmaking in wood procurement, forest resource management, forest industry development, and forest research.

Special thanks are given to primary wood-using firms that responded to the survey and to the Nebraska Forest Service, University of Nebraska, for canvassing the respondents. Their cooperation is greatly appreciated.

All volumes are reported in product-specific standard units and/or cubic feet. Volumes reported by mills in nonstandard units were converted to standard units using regional conversion factors. Reported trends and changes in the primary wood-using industry in Nebraska are based on comparisons with previous surveys of the State's primary wood-using industry conducted in 1980 and 1993. Row and column data of tables may not sum due to rounding, but data in each table cell are accurately displayed.

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Nebraska Timber Industry—An Assessment of Timber Product Output and Use, 2000

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HIGHLIGHTS

PRIMARY WOOD-USING INDUSTRY

- The total number of primary wood-using mills in Nebraska dropped only slightly from 1993 to 2000, from 35 to 34 (table 1). While the number of sawmills included in this total remained constant between 1993 and 2000 at 32 mills (table 1, fig. 1), the production capacity classification of these mills changed considerably. In 1993, there were 10 mills classified as medium-sized mills (1,000 to 5,000 MBF/year) and 7 mills classified as tiny (less than 50 MBF/year). In 2000, there were 5 medium mills and 14 tiny mills.

- The total industrial roundwood receipts showed a large decrease (31 percent) between 1993 and 2000. Total receipts decreased from 6,794 MCF in 1993 to 4,700 MCF in 2000 (table 2).

- Eighty-four percent of the roundwood processed by Nebraska's mills were harvested from Nebraska forests. Most of the imported wood came from Iowa and Kansas and was imported into the Eastern Unit (table 2). In 1993, 85 percent of the wood processed by Nebraska's mills was harvested from Nebraska forests.

INDUSTRIAL ROUNDWOOD PRODUCTION

- Approximately 5.7 million cubic feet of industrial roundwood was harvested from Nebraska's forest lands in 2000 (table 3). This 37-percent decrease from 1993 followed a threefold increase from 1980 to 1993 (fig. 2).

- Saw logs, the main form of industrial roundwood harvested from Nebraska forests, make up 95 percent of the total production. A small amount of wood was also harvested for veneer, excelsior/shavings, industrial fuel, and fenceposts (table 3). All veneer logs (all black walnut) were exported.

- In 2000, 65 percent of the roundwood harvested came from the Eastern Unit. In 1993, half of the production came from the Eastern Unit and half from the Western Unit (table 3).

- Harvesting decreased by 18 percent in the Eastern Unit and by 56 percent in the Western Unit from 1993 to 2000 (table 3).

- Nebraska mills processed 70 percent of the sawtimber harvested in Nebraska. The largest export market for Nebraska saw logs was South Dakota, which consumed nearly 27 percent of Nebraska's harvest (table 4 and fig. 3).

- Saw log receipts by Nebraska mills decreased by 31 percent between 1993 and 2000, from 41 million board feet to 29 million board feet. Nebraska timberlands supplied 82 percent of the roundwood for Nebraska saw mills (fig 4). In 1993, Nebraska timberlands supplied 83 percent of the roundwood (table 6).

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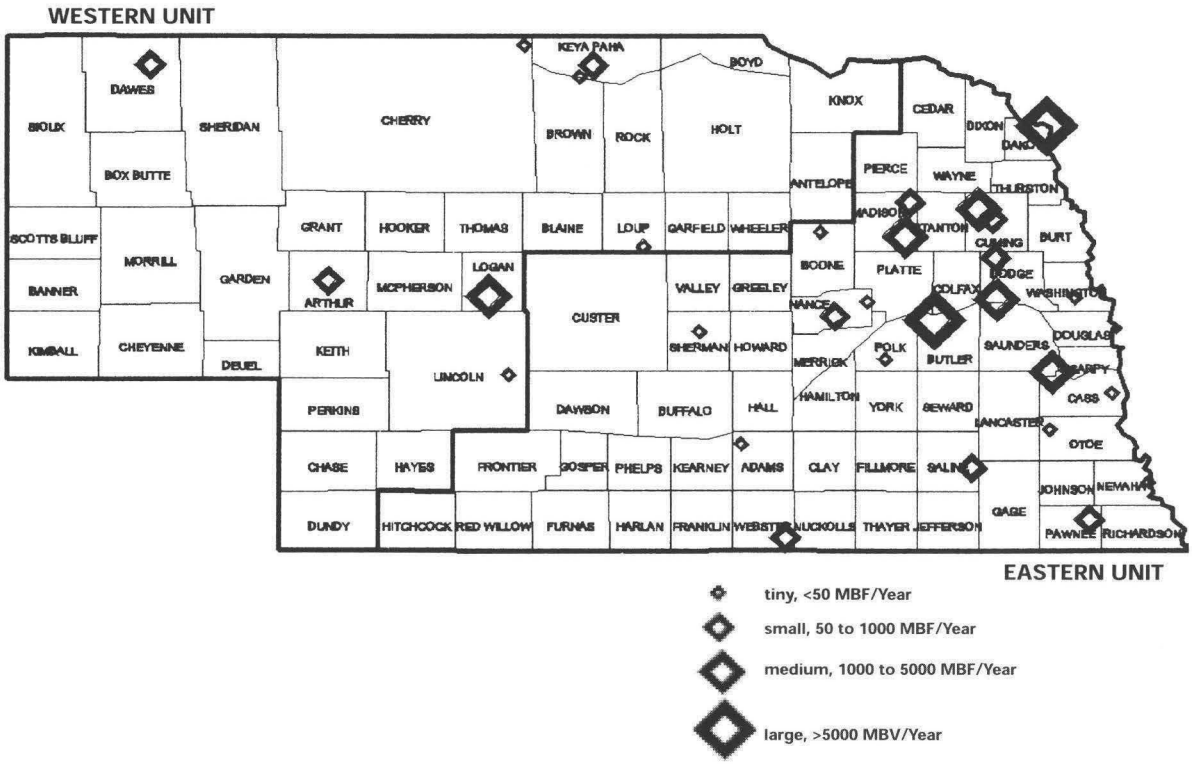

Figure 1.—*Active sawmills by Forest Survey Unit and production in Nebraska, 2000.*

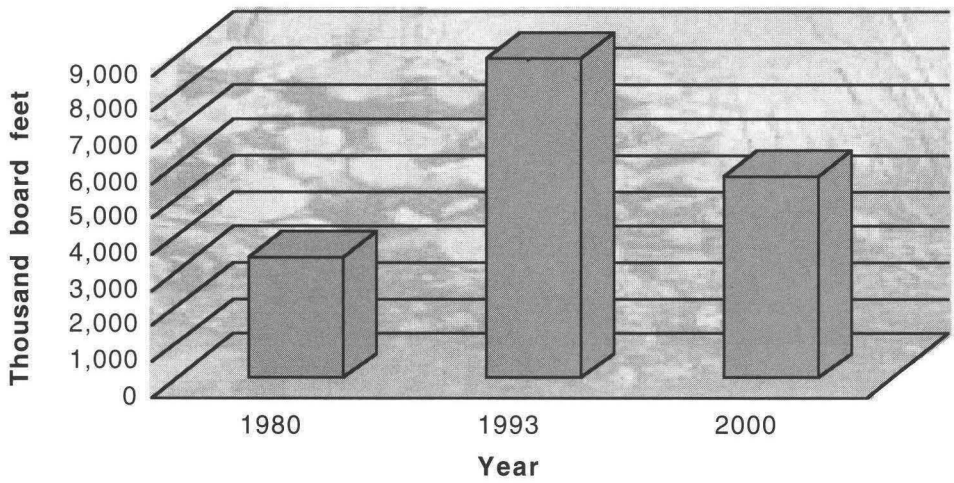

Figure 2.—*Industrial roundwood production, Nebraska, 1980, 1993, 2000.*

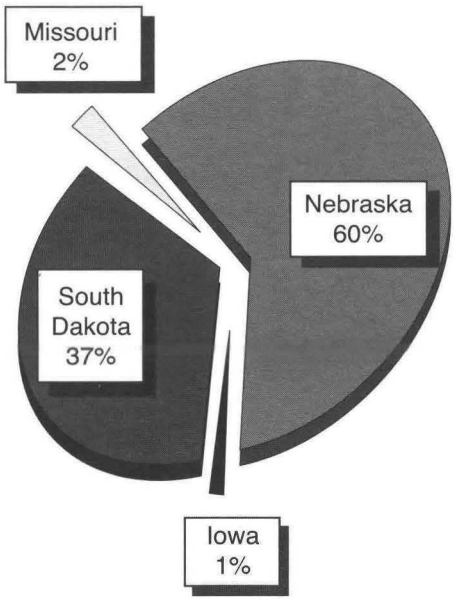

Figure 3.—*Destination of logs harvested in Nebraska, 2000.*

TIMBER REMOVALS FOR INDUSTRIAL ROUNDWOOD

- Harvest of industrial roundwood in 2000 totaled 7.9 million cubic feet (table 7). Of this total, 2.3 million cubic feet or about 29 percent was left in the woods as logging residues and logging slash (fig. 5).

- Logging residues, the unused portion of the growing-stock portions of live trees that is left in the woods, totaled 764 MCF. Logging slash, the unused portion of the non-growing-stock portion of live trees, totaled 1.5 million cubic feet (table 7, fig. 5).

- Timber harvesting for industrial roundwood removed over 6.4 million cubic feet of growing-stock volume from Nebraska's timberland inventory in 2000 (table 9). This is a 36-percent decrease from the volume removed in 1993.

- Sawtimber removals in 2000 took almost 39 million board feet out of timberlands (International 1/4-inch rule) (table 10). This is a 35-percent decrease from 1993 levels (fig. 6).

- There was a 57-percent decrease in the volume of cull trees harvested and utilized for products from 1993 (table 7). The harvest of red oak group cull trees increased from 10.9 MCF in 1993 to 24.0 MCF in 2000, while the harvest of white oak group trees fell from 74.2 MCF to 12.0 MCF.

- The utilization efficiency of trees varies by species due to differences in form and value. The utilization efficiency of various species harvested from Nebraska timberlands during this survey ranged from 88 percent for redcedar to 57 percent for honeylocust (table 7).

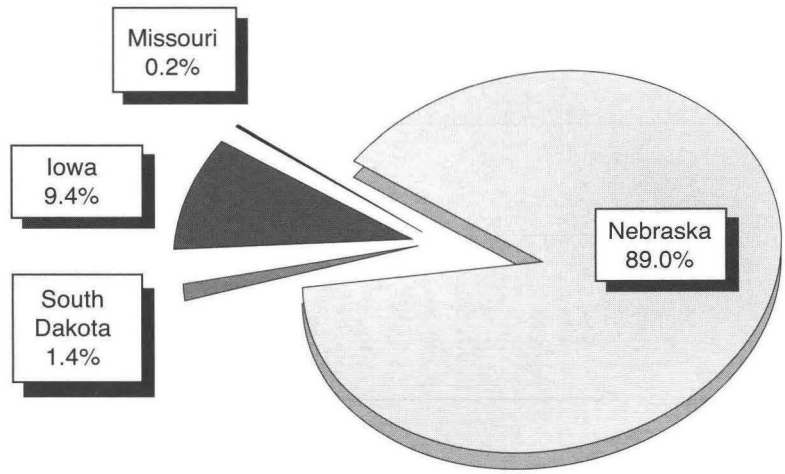

Figure 4.—*Sources of saw logs processed by Nebraska mills, 2000.*

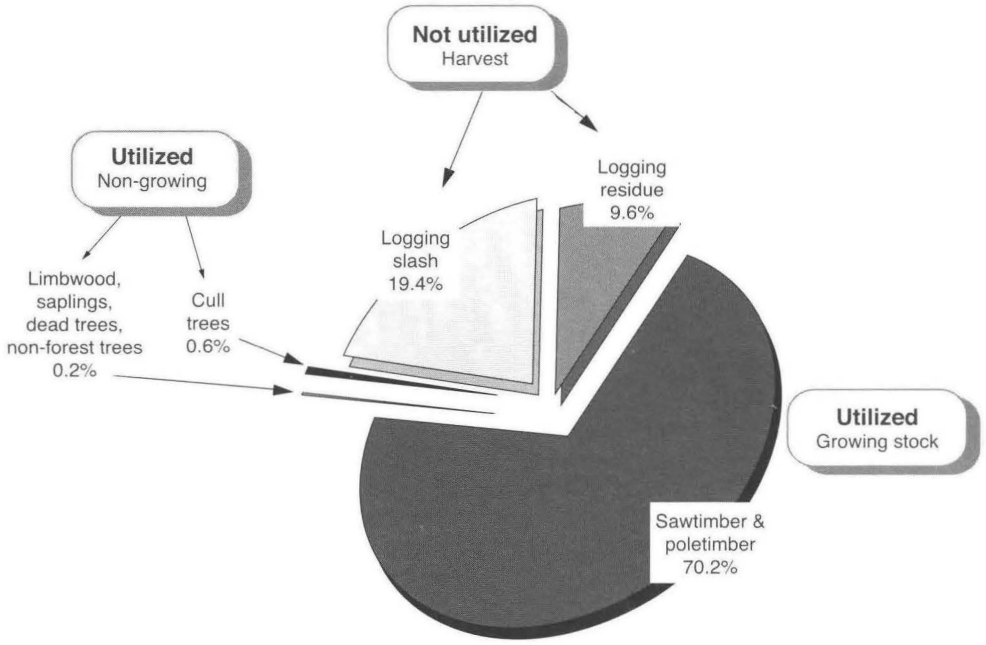

Figure 5.—*Distribution of timber removals for industrial roundwood by source of material, Nebraska, 2000.*

PRIMARY MILL RESIDUES

- During 2000, Nebraska's primary wood-using mills generated 38 thousand tons of coarse (chippable) wood residue, 20 thousand tons of fine wood residue, and 14 thousand tons of bark (table 11 and fig. 7). Overall, primary mill residues decreased by 34 percent between 1993 and 2000.

- Eighty-nine percent of all residues generated by Nebraska's primary mills were utilized—an increase from 1993 when 81 percent of all residues were utilized (table 11).

- The largest use category for mill residues was identified as "Miscellaneous" at 73 percent. This category usually includes such end uses as small dimension specialty boards, animal bedding, litter, and mulch. The second largest use category was "Industrial Fuel-Sold" at only 9 percent (fig. 8).

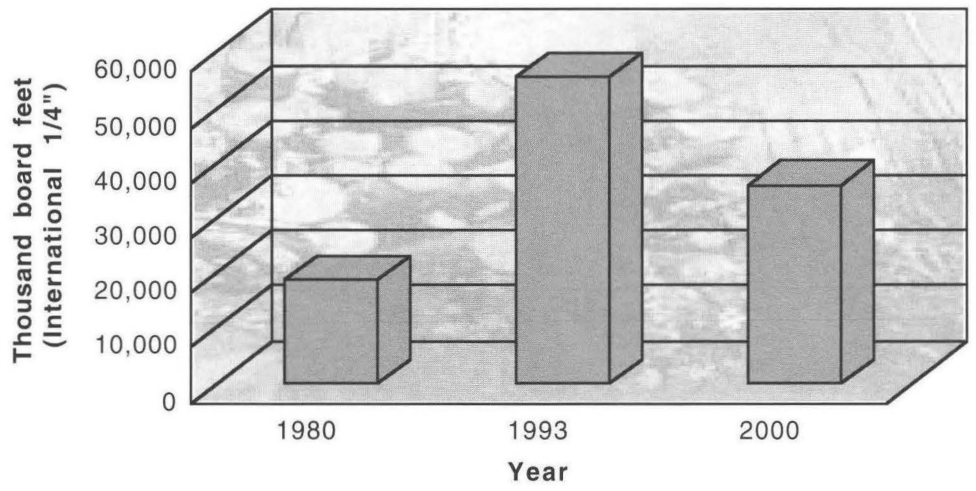

Figure 6.—*Sawtimber removals from timberlands, Nebraska, 1980, 1993, 2000.*

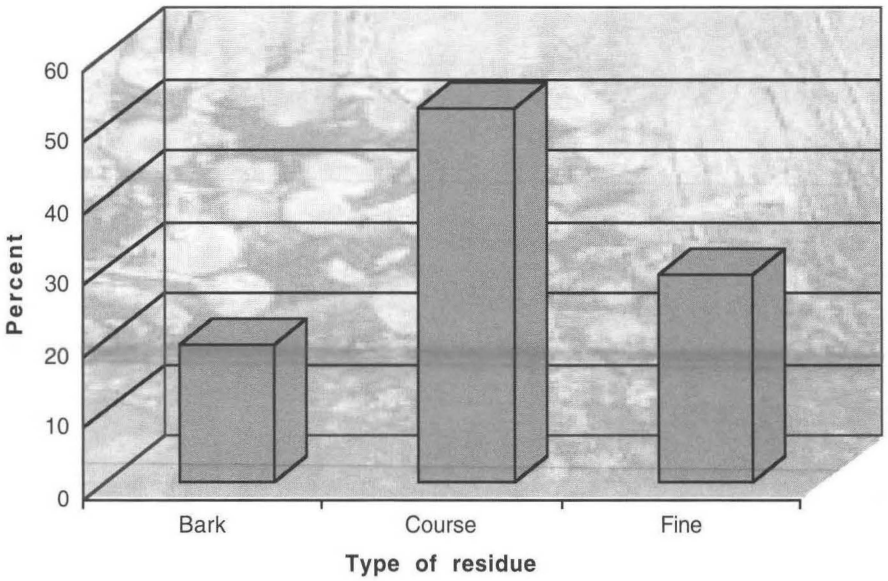

Figure 7.—*Distribution of residues generated by primary wood-using mills by type of residue, Nebraska, 2000.*

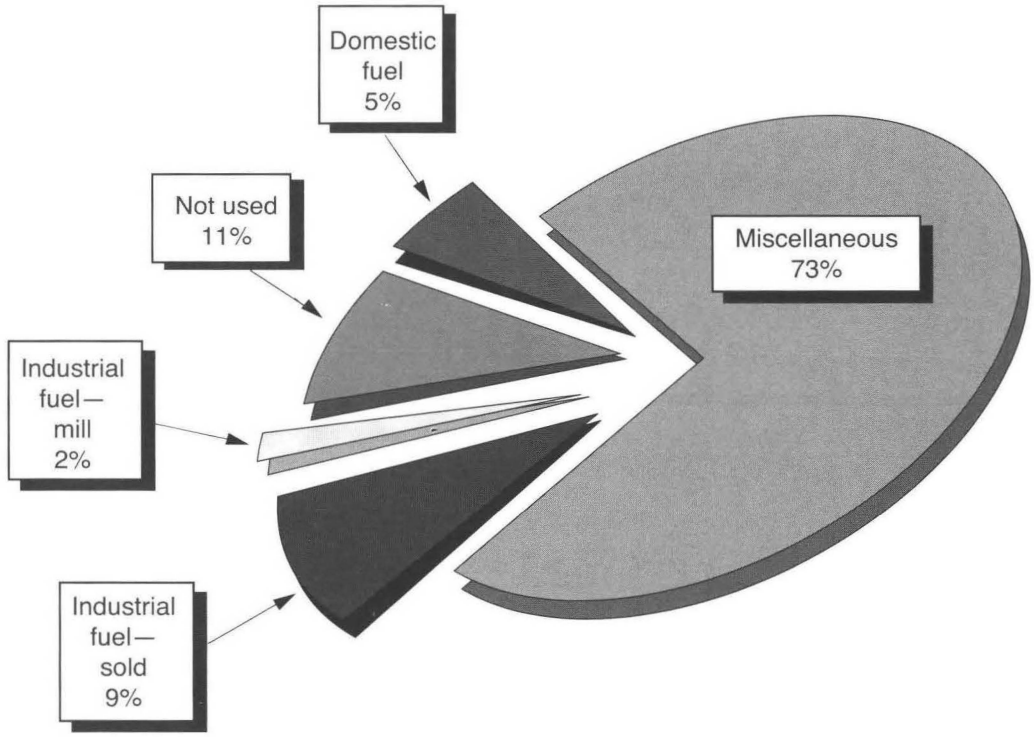

Figure 8.—*Distribution of residues generated by primary wood-using mills by method of disposal, Nebraska, 2000.*

APPENDIX

STUDY METHODS

This study was a cooperative effort of the Nebraska Forest Service (NFS) and the North Central Research Station (NCRS) of the USDA Forest Service. NFS used mail questionnaires supplied by NCRS that were designed to determine the size and composition of the State's primary wood-using mills, and followed up with additional mailings, telephone, and personal contacts until a 100 percent response was achieved. Completed questionnaires were sent to NCRS for editing and processing.

As part of data editing and processing, all industrial roundwood volumes reported on the questionnaires were converted to standard units of measure using regional conversion factors. Timber removals by source of material and harvest residues generated during logging were estimated from standard product volumes using factors developed from logging utilization studies previously conducted by NCRS. Finalized data on Nebraska's industrial roundwood receipts were loaded into a regional timber removals database where they were supplemented with data on out-of-state uses of Nebraska's roundwood to provide a complete assessment of Nebraska's timber product output.

DEFINITION OF TERMS

Board foot

Unit of measure applied to roundwood. It relates to lumber that is 1 foot long, 1 foot wide, and 1 inch thick (or its volume equivalent).

Central stem

The portion of a tree between a 1-foot stump and the minimum 4.0-inch top diameter outside bark or the point where the central stem breaks into limbs.

Coarse mill residue

Wood residue suitable for chipping such as slabs, edgings, and veneer cores.

Commercial species

Tree species presently or prospectively suitable for industrial wood products. (Note: Excludes species of typically small size, poor form, or inferior quality such as hophornbeam, Osage-orange, and redbud.)

Cull removals

Net volume of rough and rotten trees, plus the net volume in sections of the central stem of growing-stock trees that do not meet regional merchantability standards, harvested for industrial roundwood products.

Dead removals

Net volume of dead trees harvested for industrial roundwood products.

Diameter at breast height (d.b.h.)

The outside bark diameter at 4.5 feet above the forest floor on the uphill side of the tree. For determining breast height, the forest floor includes the duff layer that may be present but does not include unincorporated woody debris that may rise above the ground line.

Fine mill residue

Wood residue not suitable for chipping such as sawdust and veneer clippings.

Forest land

Land at least 10 percent stocked (Note: Historically, 16.7 percent was used based on full stocking equaling 100 percent) by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use. (Note: Stocking is measured by comparing specified standards with basal area and/or number of trees, age or size, and spacing.) The minimum area for classification of land as forest land is 1 acre. Roadside, streamside, and shelterbelt strips of timber must have a width of at least 120 feet, measured across the tree crowns, to qualify as forest land. Unimproved roads and trails or clearings in forest areas shall be classed as forest if less than 120 feet wide. Streams and other bodies of water

shall be classed as forest if less than 30 feet wide.

Growing-stock removals

The growing-stock volume removed from the timberland inventory by harvesting industrial roundwood products. (Note: Includes sawtimber removals, poletimber removals, and logging residues.)

Growing-stock tree

A live timberland tree of commercial species that contains at least one 12-foot saw log or two 8-foot saw logs meeting minimum log/tree grade requirements, now or prospectively, and that meets specified standards of size, quality, and merchantability. At least one-third of the gross board-foot volume must be merchantable material and at least 50 percent sound at any point. (Note: Excludes rough, rotten, and dead trees.)

Growing-stock volume

Net volume of growing-stock trees 5.0 inches d.b.h. and over, from 1 foot above the ground to a minimum 4.0-inch top diameter outside bark of the central stem or to the point where the central stem breaks into limbs.

Hardwoods

Dicotyledonous trees, usually broad-leaved and deciduous.

Harvest residues

The total net volume of unused portions of trees cut or killed by logging. (Note: Includes both logging residues and logging slash.)

Industrial roundwood production

The quantity of industrial roundwood harvested in a geographic area.

Industrial roundwood products

Saw logs, pulpwood, veneer logs, poles, commercial posts, piling, cooperage logs, particleboard bolts, shaving bolts, lath bolts, charcoal bolts, and chips from roundwood used for fuel, pulp, or board products.

Industrial roundwood receipts

The quantity of industrial roundwood received by commercial mills in a geographic area.

International 1/4-inch rule

A log rule or formula for estimating the board-foot volume of logs, allowing 1/2 inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In this form, 1/4 inch of kerf is assumed. This rule is used as the USDA Forest Service standard log rule in the Eastern United States.

Limbwood removals

Net volume of all portions of a tree other than the central stem (including forks, large limbs, tops, and stumps) harvested for industrial roundwood products.

Logging residue

Net volume of unused portions of the merchantable central stem of growing-stock trees cut or killed by logging.

Logging slash

Net volume of unused portions of the unmerchantable (non-growing-stock) sections of trees cut or killed by logging.

Merchantable sections

Sections of the central stem of growing-stock trees that meet either pulpwood or saw log specifications.

Net volume

Gross volume less deductions for rot, sweep, or other defects affecting use for roundwood products.

Noncommercial species

Tree species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial roundwood products. Classified in volume tables as rough trees.

Nonforest land

Land that has never supported forests, and land formerly forested where use for timber management is precluded by development for other uses. (Note: Includes areas used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining clearings, powerline clearings of any width, and 1- to 39.9-acre areas of water classified by the Bureau of the Census as land. If intermingled in forest areas, improved roads and nonforest strips must be more than 120 feet wide and more than 1 acre to qualify as nonforest land.)

Nonforest land removals

Net volume of trees on nonforest lands harvested for industrial roundwood products.

Poletimber

A growing-stock tree at least 5.0 inches d.b.h. but smaller than sawtimber size (9.0 inches d.b.h. for softwoods, 11.0 inches d.b.h. for hardwoods).

Poletimber removals

Net volume in the merchantable central stem of poletimber trees harvested for industrial roundwood products.

Primary wood-using mills
Mills receiving roundwood or chips from roundwood for processing into products.

Primary wood-using mill residue
Wood materials (coarse and fine) and bark generated at manufacturing plants from roundwood processed into principal products. These residues include wood products (byproducts) obtained incidental to production of principal products and wood materials not utilized for some byproduct.

Rotten tree
A tree that does not meet regional merchantability standards because of excessive unsound cull.

Rough tree
A tree that does not meet regional merchantability standards because of excessive sound cull. Includes noncommercial tree species.

Roundwood
Logs, bolts, or other round sections cut from trees (including chips from roundwood).

Sapling
A live tree between 1.0 and 5.0 inches d.b.h.

Sapling removals
Net volume in saplings harvested for industrial roundwood products.

Saw log
A log meeting minimum standards of diameter, length, and defect, sound and straight, and with a minimum diameter outside bark of 7.0 inches for softwoods and 9.0 inches for hardwoods, or other combinations of size and defect specified by regional standards.

Saw log portion
That portion of the central stem of sawtimber trees between the stump and the saw log top.

Saw log top
The point on the central stem of sawtimber trees above which a saw log cannot be produced. The minimum saw log top is 7.0 inches diameter outside bark (d.o.b.) for softwoods and 9.0 inches d.o.b. for hardwoods.

Sawtimber removals
As used in table 7, sawtimber removals refers to the net volume in the merchantable central stem of sawtimber trees harvested for industrial roundwood products. (Note: Includes the saw log and upper stem portions of sawtimber trees.) In the case of sawtimber volume removed from timberland inventory as in table 10, sawtimber removals refers to the net volume in the saw log portion of sawtimber trees harvested for roundwood products or left on the ground as harvest residue, and is usually expressed in thousands of board feet (International 1/4-inch rule).

Sawtimber tree
A growing-stock tree containing at least a 12-foot saw log or two noncontiguous saw logs 8 feet or longer, and meeting regional specifications for freedom from defect. Softwoods must be at least 9.0 inches d.b.h. and hardwoods must be at least 11.0 inches d.b.h.

Softwoods
Coniferous trees, usually evergreen, having needles or scale-like leaves.

Timberland
Forest land that is capable of producing in excess of 20 cubic feet per acre per year of industrial roundwood products under natural conditions, is not withdrawn from timber utilization by statute or administrative regulation, and is not associated with urban or rural development.

Timber product output
The volume of roundwood products produced from an area's forests.

Timber removals
The total net volume of trees removed for industrial roundwood products or left on the ground as harvest residues.

Tree
A woody plant usually having one or more perennial stems, a more or less definitely formed crown of foliage, and a height of at least 12 feet at maturity.

Upper stem portion
That portion of the central stem of sawtimber trees between the saw log top and the minimum top diameter of 4.0 inches outside bark or to the point where the central stem breaks into limbs.

Veneer log
Logs to be used in the production of plywood, finished panels, or veneer sheets, both rotary cut and sliced.

COMMON AND SCIENTIFIC NAMES OF TREE SPECIES MENTIONED IN THIS REPORT

SOFTWOODS

Ponderosa pine ..... *Pinus ponderosa*
Eastern redcedar ..... *Juniperus virginiana*

HARDWOODS

Ash
- White ash ..... *Fraxinus americana*
- Green ash ..... *Fraxinus pennsylvanica*

Quaking aspen ..... *Populus tremuloides*
Balsam poplar ..... *Populus balsamifera*
American basswood ..... *Tilia americana*
Boxelder ..... *Acer negundo*
Black cherry ..... *Prunus serotina*
Northern catalpa ..... *Catalpa speciosa*
Cottonwood
- Eastern cottonwood ..... *Populus deltoides*
- Plains cottonwood ..... *Populus sargentii*

Elm
- American elm ..... *Ulmus americana*
- Rock elm ..... *Ulmus thomasii*
- Siberian elm ..... *Ulmus pumila*
- Slippery elm ..... *Ulmus rubra*

Hackberry ..... *Celtis occidentalis*
Hickory
- Bitternut hickory ..... *Carya cordiformis*
- Mockernut hickory ..... *Carya tomentosa*
- Pignut hickory ..... *Carya glabra*
- Shagbark hickory ..... *Carya ovata*

Honeylocust ..... *Gleditsia triacanthos*
Silver maple ..... *Acer saccharinum*
Red mulberry ..... *Morus rubra*
White oaks
- Bur oak ..... *Quercus macrocarpa*
- Chinkapin oak ..... *Quercus muehlenbergii*
- Swamp white oak ..... *Quercus bicolor*

Red oaks
- Black oak ..... *Quercus velutina*
- Blackjack oak ..... *Quercus marilandica*
- Northern red oak ..... *Quercus rubra*

Osage-orange ..... *Maclura pomifera*
Sycamore ..... *Platanus occidentalis*
Black walnut ..... *Juglans nigra*
Black willow ..... *Salix nigra*

TABLE TITLES

Table 1.--*Number of active primary wood-using mills, Nebraska, 1980, 1993, and 2000*

Table 2.--*Industrial roundwood receipts by species group and State of origin, Nebraska, 2000*

Table 3.—*Industrial roundwood production by Forest Survey Unit, species group, and type of product, Nebraska, 2000*

Table 4.—*Saw log production by Forest Survey Unit, species group, and State of destination, Nebraska, 2000*

Table 5.—*Saw log production from roundwood by Forest Survey Unit, county, and species group, Nebraska, 2000*

Table 6.—*Saw log receipts by Forest Survey Unit, species group, and State of origin, Nebraska, 2000*

Table 7.—*Timber removals for industrial roundwood by source of material and species group, Nebraska, 2000*

Table 8.—*Harvest residues generated by industrial roundwood harvesting from timberland by Forest Survey Unit, county, and species group, Nebraska, 2000*

Table 9.—*Growing-stock removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Nebraska, 2000*

Table 10.—*Sawtimber removals from timberland for industrial roundwood production by Forest Survey Unit, county, and species group, Nebraska, 2000*

Table 11.—*Residues produced at primary wood-using mills by type of material, type of use, and Forest Survey Unit, Nebraska, 2000*

TABLES

Table 1.--Number of active primary wood-using mills, Nebraska, 1980, 1993, and 2000

Kind of mill	1980	1993	2000
Sawmills			
>5000 mbf [1]	--	2	2
1000 to 5000 mbf [1]	7	10	5
50 to 1000 mbf [1]	35	13	11
<50 mbf	--	7	14
Total	42	32	32
Other mills	4	3	2
All mills	46	35	34

[1] *Thousand board feet, International 1/4-inch rule.*

Table 2.--Industrial roundwood receipts by species group and State of origin, Nebraska, 2000

(In thousand cubic feet)

Species group	Total	Iowa	Kansas	Missouri	Nebraska	South Dakota
			SOFTWOODS			
Redcedar	313	--	--	--	313	--
Ponderosa pine	94	--	--	--	94	--
Total	408	--	--	--	408	--
			HARDWOODS			
Soft maple	22	--	--	--	22	--
Hackberry	2	--	--	--	2	--
Ash	12	--	--	--	12	--
Honeylocust	0	--	--	--	0	--
Black walnut	28	2	--	9	17	--
Sycamore	0	--	--	--	0	--
Cottonwood	4,170	323	322	35	3,429	61
Red oak	9	--	--	--	9	--
White oak	37	0	--	--	37	--
Elm	5	--	--	--	5	--
Other hardwoods	0	--	--	--	0	--
Total	4,292	325	322	44	3,540	61
All species	4,700	325	322	44	3,948	61

Rows and columns may not sum due to rounding.

Table 3.--Industrial roundwood production by Forest Survey Unit, species group, and type of product, Nebraska, 2000 [1]

ALL UNITS

Species group	Saw logs		Veneer logs		Excelsior/ Shavings	Industrial fuelwood		Posts		All products
	MBF [2]	MCF [3]	MBF [2]	MCF [3]	MCF [3]	Cords [4]	MCF [3]	M pieces	MCF [3]	MCF [3]
Softwoods										
Redcedar	160	34	--	--	279	--	--	1	0	314
Ponderosa pine	9,264	1,609	--	--	--	--	--	--	--	1,609
Total	9,424	1,643	--	--	279	--	--	1	0	1,923
Hardwoods										
Soft maple	154	24	--	--	--	--	--	--	--	24
Hard maple	--	--	--	--	--	50	3	--	--	--
Hickory	11	2	--	--	--	--	--	--	--	2
Hackberry	12	2	--	--	--	--	--	--	--	2
Ash	71	12	--	--	--	20	1	--	--	12
Honeylocust	3	0	--	--	--	--	--	--	--	0
Black walnut	691	106	46	6	--	--	--	--	--	112
Sycamore	0	0	--	--	--	--	--	--	--	0
Cottonwood	22,553	3,480	--	--	--	20	1	--	--	3,475
Red oak	410	73	--	--	--	--	--	--	--	73
White oak	212	38	--	--	--	10	1	--	--	38
Basswood	17	3	--	--	--	--	--	--	--	3
Elm	34	5	--	--	--	90	6	--	--	5
Other hardwoods	0	0	--	--	--	10	1	--	--	0
Total	24,171	3,746	46	6	--	200	14	--	--	3,753
All species	33,595	5,390	46	6	279	200	14	1	0	5,675

(Table 3 continued on next page)

(Table 3 continued)

EASTERN UNIT

Species group	Saw logs		Veneer logs		Excelsior/ Shavings	Industrial fuelwood		Posts		All products
	MBF [2]	*MCF* [3]	*MBF* [2]	*MCF* [3]	*MCF* [3]	*Cords* [4]	*MCF* [3]	*M pieces*	*MCF* [3]	*MCF* [3]
Softwoods										
Redcedar	37	8	--	--	223	--	--	--	--	231
Ponderosa pine	3	1	--	--	--	--	--	--	--	1
Total	40	8	--	--	223	--	--	--	--	232
Hardwoods										
Soft maple	147	23	--	--	--	--	--	--	--	23
Hard maple	--	--	--	--	--	50	--	--	--	--
Hickory	11	2	--	--	--	--	--	--	--	2
Hackberry	9	1	--	--	--	--	--	--	--	1
Ash	30	5	--	--	--	20	--	--	--	5
Honeylocust	3	0	--	--	--	--	--	--	--	0
Black walnut	686	105	46	6	--	--	--	--	--	111
Sycamore	0	0	--	--	--	--	--	--	--	0
Cottonwood	20,886	3,223	--	--	--	20	--	--	--	3,223
Red oak	410	73	--	--	--	--	--	--	--	73
White oak	206	37	--	--	--	10	--	--	--	37
Basswood	17	3	--	--	--	--	--	--	--	3
Elm	16	3	--	--	--	90	--	--	--	3
Other hardwoods	0	0	--	--	--	10	--	--	--	0
Total	22,455	3,481	46	6	--	200	--	--	--	3,487
All species	22,495	3,489	46	6	223	200	--	--	--	3,719

WESTERN UNIT

Species group	Saw logs		Veneer logs		Excelsior/ Shavings	Industrial fuelwood		Posts		All products
	MBF [2]	MCF [3]	MBF [2]	MCF [3]	MCF [3]	Cords [4]	MCF [3]	M pieces	MCF [3]	MCF [3]
Softwoods										
Redcedar	123	26	--	--	56	--	--	1	0	83
Ponderosa pine	9,261	1,609	--	--	--	--	--	--	--	1,609
Total	9,384	1,635	--	--	56	--	--	1	0	1,691
Hardwoods										
Soft maple	7	1	--	--	--	--	--	--	--	1
Hackberry	3	0	--	--	--	--	--	--	--	0
Ash	40	7	--	--	--	--	--	--	--	7
Black walnut	5	1	--	--	--	--	--	--	--	1
Cottonwood	1,638	253	--	--	--	--	--	--	--	253
White oak	6	1	--	--	--	--	--	--	--	1
Elm	18	3	--	--	--	--	--	--	--	3
Total	1,716	266	--	--	--	--	--	--	--	266
All species	11,100	1,901	--	--	56	--	--	1	0	1,957

[1] *Based on factors obtained from the most current utilization study.*

[2] *Thousand board feet, International 1/4-inch rule.*

[3] *Thousand cubic feet.*

[4] *Standard cords are 128 cubic feet consisting of 79 cubic feet of wood and 49 cubic feet of bark and air space.*

Value of "0" indicates value greater than 0 but less than 500.

Rows and columns may not sum due to rounding.

Table 4.--Saw log production by Forest Survey Unit, species group, and State of destination, Nebraska, 2000

(In thousand board feet) [1]

ALL UNITS

Species	Total	Iowa	Missouri	Nebraska	South Dakota
Softwoods					
Redcedar	160	--	--	160	--
Ponderosa pine	9,264	--	--	544	8,720
Total	9,424	--	--	704	8,720
Hardwoods					
Soft maple	154	--	17	137	--
Hickory	11	--	11	--	--
Hackberry	12	--	--	12	--
Ash	71	--	--	71	--
Honeylocust	3	414	166	3	--
Black walnut	691	--	--	112	--
Sycamore	0	35	11	0	290
Cottonwood	22,558	--	331	22,223	28
Red oak	410	7	--	51	--
White oak	212	--	--	205	--
Basswood	17	--	17	--	--
Elm	34			34	
Other hardwoods	0	--	--	0	--
Total	24,171	455	552	22,846	317
All species	33,595	455	552	23,551	9,037

EASTERN UNIT

Species	Total	Iowa	Missouri	Nebraska	South Dakota
Softwoods					
Redcedar	37	--	--	37	--
Ponderosa pine	3	--	--	3	--
Total	40	--	--	40	--
Hardwoods					
Soft maple	147	--	17	131	--
Hickory	11	--	11	--	--
Hackberry	9	--	--	9	--
Ash	30	--	--	30	--
Honeylocust	3	--	--	3	--
Black walnut	686	414	166	107	--
Sycamore	0	--	--	0	--

Cottonwood	20,920	35	11	20,668	207
Red oak	410	--	331	51	28
White oak	206	7	--	199	--
Basswood	17	--	17	--	--
Elm	16	--	--	16	--
Other hardwoods	0	--	--	0	--
Total	22,455	455	552	21,213	235
All species	22,495	455	552	21,213	235

WESTERN UNIT

Species	Total	Iowa	Missouri	Nebraska	South Dakota
Softwoods					
Redcedar	123	--	--	123	--
Ponderosa pine	9,261	--	--	541	8,720
Total	9,384	--	--	664	8,720
Hardwoods					
Soft maple	7	--	--	7	--
Hackberry	3	--	--	3	--
Ash	40	--	--	40	--
Black walnut	5	--	--	5	--
Cottonwood	1,638	--	--	1,555	83
White oak	6	--	--	6	--
Elm	18	--	--	18	--
Total	1,716	--	--	1,633	83
All species	11,100	--	--	2,297	8,803

[1] *International 1/4-inch rule.*

Rows and columns may not sum due to rounding.

Table 5.--Saw log production from roundwood by Forest Survey Unit, county, and species group, Nebraska, 2000

(In thousand board feet) [1]

EASTERN UNIT

Unit and county	Red cedar	Ponderosa pine	Total softwoods	Soft maple	Hickory	Hackberry	Ash	Honey-locust	Black walnut	Sycamore	Cotton-wood	Red oak	White oak	Bass-wood	Elm	Other hardwoods	Total hardwoods	All species
Eastern Unit																		
Boone	--	--	--	3	--	--	--	--	128	--	21	--	--	--	--	--	152	152
Buffalo	--	--	--	--	--	--	--	--	--	--	223	--	--	--	--	--	223	223
Burt	--	--	--	--	--	--	--	--	1	--	744	--	0	--	--	--	745	745
Butler	--	--	--	--	--	--	--	--	1	--	192	--	0	--	--	--	194	194
Cass	--	--	--	--	--	--	--	--	10	--	690	--	--	--	--	--	700	700
Cedar	1	--	1	--	--	--	--	--	4	--	483	28	--	--	--	--	514	515
Colfax	--	--	--	--	--	--	--	--	--	--	1,020	--	--	--	--	--	1,020	1,020
Cuming	--	--	--	--	--	--	--	--	15	--	1,432	--	--	--	--	--	1,447	1,447
Custer	1	--	1	--	--	--	--	--	--	--	198	--	--	--	--	--	198	199
Dakota	--	--	--	--	--	--	--	--	--	--	1,434	--	--	--	--	--	1,434	1,434
Dawson	--	--	--	--	--	--	--	--	--	--	1,313	--	--	--	--	--	1,313	1,313
Dixon	--	--	--	--	--	--	--	--	--	--	552	--	--	--	--	--	552	552
Dodge	--	--	--	--	--	--	--	--	1	--	1,058	1	0	--	--	--	1,060	1,060
Douglas	1	--	1	--	--	--	21	--	25	--	192	--	21	--	--	--	258	259
Franklin	--	--	--	--	--	--	--	--	--	--	720	--	--	--	--	--	720	720
Furnas	--	--	--	--	--	--	--	--	--	--	223	--	--	--	--	--	223	223
Gage	--	--	--	100	--	--	--	--	86	--	125	--	--	--	--	--	311	311
Greeley	--	--	--	--	--	--	--	--	--	--	2	--	--	--	1	--	3	3
Hall	--	--	--	--	--	--	--	--	4	--	--	--	6	--	--	--	10	10
Howard	--	--	--	--	--	--	--	--	4	--	2	--	--	--	--	--	5	5
Johnson	--	--	--	--	--	--	--	--	32	--	50	--	50	--	--	--	132	132
Kearney	--	--	--	--	--	--	--	--	--	--	198	--	--	--	--	--	198	198
Lancaster	3	--	3	11	--	--	--	--	15	--	50	4	--	--	4	--	84	87
Madison	--	--	--	--	--	--	--	--	--	--	519	--	--	--	--	--	519	519
Merrick	10	--	10	--	--	--	--	3	--	--	348	--	--	--	--	--	351	361
Nance	6	3	8	1	--	3	8	--	8	0	522	1	17	--	5	--	566	574
Nemaha	6	--	6	--	--	--	--	--	25	--	--	40	--	--	--	--	65	71
Otoe	2	--	2	0	--	--	--	--	76	--	--	4	2	--	2	--	84	86
Pawnee	--	--	--	--	--	--	--	--	--	--	50	--	50	--	--	--	100	100
Phelps	--	--	--	--	--	--	--	--	--	--	223	--	--	--	--	--	223	223
Pierce	--	--	--	--	--	--	--	--	--	--	296	--	--	--	--	--	296	296
Platte	--	0	0	--	--	--	0	--	--	--	1,020	0	--	--	3	--	1,023	1,023
Polk	5	--	5	0	--	0	1	--	1	--	882	0	--	--	1	--	887	892
Red Willow	--	--	--	--	--	--	--	--	--	--	223	--	--	--	--	--	223	223
Richardson	1	--	1	17	11	5	--	--	220	--	61	331	50	17	--	--	711	712
Saline	--	--	--	15	--	--	--	--	--	--	75	--	--	--	--	--	90	90
Saunders	--	--	--	--	--	--	--	--	--	--	2,382	--	--	--	--	--	2,382	2,382
Seward	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--	--	1	1
Stanton	--	--	--	--	--	--	--	--	--	--	1,499	--	--	--	--	--	1,499	1,499
Thurston	--	--	--	--	--	--	--	--	31	--	779	--	7	--	--	--	816	816
Washington	1	--	1	1	--	1	1	--	3	--	331	--	1	--	--	--	336	336
Wayne	--	--	--	--	--	--	--	--	--	--	552	--	--	--	--	--	552	552
Webster	--	--	--	--	--	--	0	--	0	--	239	--	--	--	0	0	240	240
York	1	--	1	--	--	--	--	--	--	--	--	--	0	--	--	--	0	2
Total	37	3	40	147	11	9	30	3	686	0	20,920	410	206	17	16	0	22,445	22,495

Western Unit																		
Antelope	--	--	--	6	--	3	28	--	--	--	779	--	--	--	3	--	818	818
Arthur	5	--	5	--	--	--	5	--	--	--	205	--	--	--	8	--	218	223
Boyd	--	--	--	--	--	--	--	--	5	--	--	--	--	--	--	--	5	5
Brown	60	10	70	1	--	--	0	--	--	--	--	--	0	--	--	--	2	72
Chase	--	--	--	--	--	--	--	--	--	--	276	--	--	--	--	--	276	276
Cherry	5	2	7	--	--	--	0	--	--	--	--	--	0	--	--	--	1	7
Dawes	--	7,756	7,756	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7,756
Keya Paha	35	78	113	--	--	--	2	--	--	--	--	--	5	--	--	--	7	120
Knox	--	--	--	--	--	--	--	--	--	--	172	--	--	--	--	--	172	172
Lincoln	0	--	0	--	--	--	--	--	--	--	198	--	--	--	--	--	198	198
Loup	10	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10
McPherson	5	--	5	--	--	--	5	--	--	--	8	--	--	--	8	--	20	25
Rock	3	1	4	--	--	--	0	--	--	--	--	--	0	--	--	--	1	5
Sheridan	--	84	84	--	--	--	--	--	--	--	--	--	--	--	--	--	--	84
Sioux	--	1,329	1,329	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,329
Total	123	9,261	9,384	7	--	3	40	--	5	--	1,638	--	6	--	18	--	1,716	11,100
State total	160	9,264	9,424	154	11	12	71	3	691	0	22,558	410	212	17	34	0	24,171	33,595

[1] *International 1/4-inch rule.*

Columns and rows may not sum due to rounding.

Table 6.--Saw log receipts by Forest Survey Unit, species group, and State of origin, Nebraska, 2000

(In thousand board feet) [1]

ALL UNITS

Species	Total	Iowa	Kansas	Missouri	Nebraska	South Dakota
Softwoods						
Redcedar	160	--	--	--	160	--
Ponderosa pine	544	--	--	--	544	--
Total	704	--	--	--	704	--
Hardwoods						
Soft maple	137	--	--	--	137	--
Hackberry	12	--	--	--	12	--
Ash	71	--	--	--	71	--
Honeylocust	3	--	--	--	3	--
Black walnut	162	11	--	40	112	--
Sycamore	0	--	--	--	0	--
Cottonwood	27,191	2,285	2,088	250	22,223	345
Red oak	51	--	--	--	51	--
White oak	205	0	--	--	205	--
Elm	34	--	--	--	34	--
Other hardwoods	0	--	--	--	0	--
Total	27,865	2,296	2,088	290	22,846	345
All species	28,570	2,296	2,088	290	23,551	345

EASTERN UNIT

Species	Total	Iowa	Kansas	Missouri	Nebraska	South Dakota
Softwoods						
Redcedar	37	--	--	--	37	--
Ponderosa pine	3	--	--	--	3	--
Total	40	--	--	--	40	--
Hardwoods						
Soft maple	136	--	--	--	136	--
Hackberry	12	--	--	--	12	--
Ash	18	--	--	--	38	--
Honeylocust	38	--	--	--	3	--
Black walnut	3	11	--	40	86	--
Sycamore	137	--	--	--	0	--

Cottonwood	25,988	2,285	2,088	250	21,020	345
Red oak	51	--	--	--	51	--
White oak	179	0	--	--	178	--
Elm	19	--	--	--	19	--
Other hardwoods	0	--	--	--	0	--
Total	26,562	2,296	2,088	290	21,543	345
All species	26,602	2,296	2,088	290	21,583	345

WESTERN UNIT

Species	Total	Iowa	Kansas	Missouri	Nebraska	South Dakota
Softwoods						
Redcedar	123	--	--	--	123	--
Ponderosa pine	541	--	--	--	541	--
Total	664	--	--	--	664	--
Hardwoods						
Soft maple	1	--	--	--	1	--
Ash	33	--	--	--	33	--
Black walnut	26	--	--	--	26	--
Cottonwood	1,202	--	--	--	1,202	--
White oak	27	--	--	--	27	--
Elm	15	--	--	--	15	--
Total	1,303	--	--	--	1,303	--
All species	1,968	--	--	--	1,968	--

[1] *International 1/4-inch rule.*

Columns and rows may not sum due to rounding.

Table 7.--Timber removals for industrial roundwood by source of material and species group, Nebraska, 2000

(In thousands of cubic feet) [1]

ALL UNITS

Species group	Growing stock				Non-growing stock							Total material used for products	Total material not used	Total material harvested
	Used for products		Logging residue (not used)	Total	Used for products					Logging slash (not used)	Total			
	Sawtimber	Poletimber			Limbwood	Saplings	Cull trees	Dead trees	Nonforest trees					
Softwoods														
Redcedar	288	26	26	339	--	0	0	0	--	19	19	314	44	358
Ponderosa pine	1,607	--	172	1,780	--	--	2	--	--	249	251	1,609	422	2,031
Total	1,895	26	198	2,119	--	0	2	0	--	268	270	1,923	466	2,389
Hardwoods														
Soft maple	21	--	2	23	--	--	3	1	--	7	11	24	10	34
Hickory	2	--	1	2	0	--	0	--	--	1	1	2	1	3
Hackberry	2	--	0	2	--	--	0	0	--	1	1	2	1	3
Ash	11	--	5	15	0	--	1	--	--	4	5	12	9	21
Honeylocust	0	--	0	1	0	--	0	--	--	0	0	0	0	1
Black walnut	94	--	9	103	2	--	3	--	14	28	47	112	37	150
Cottonwood	3,481	--	526	4,006	--	--	--	--	--	1,214	1,214	3,481	1,739	5,220
Red oak	47	3	15	64	0	--	24	--	--	19	43	73	34	107
White oak	24	1	8	33	0	--	13	--	--	10	22	38	17	55
Basswood	2	--	0	3	--	--	0	0	--	1	1	3	1	4
Elm	5	--	1	5	--	--	1	0	--	2	2	5	2	8
Other hardwoods	0	--	0	0	--	--	0	0	--	0	0	0	0	0
Total	3,688	4	566	4,258	2	--	44	1	14	1,286	1,347	3,753	1,852	5,604
All Species	5,583	29	764	6,376	2	0	46	1	14	1,553	1,617	5,676	2,317	7,993

EASTERN UNIT

Species group	Growing stock				Non-growing stock							Total material used for products	Total material not used	Total material harvested
	Used for products		Logging residue (not used)	Total	Used for products					Logging slash (not used)	Total			
	Sawtimber	Poletimber			Limbwood	Saplings	Cull trees	Dead trees	Nonforest trees					
Softwoods														
Redcedar	211	20	20	252	--	--	0	--	--	8	8	231	28	260
Ponderosa pine	1	--	0	1	--	--	0	--	--	0	0	1	0	1
Total	211	20	20	252	--	--	0	--	--	8	8	232	29	260
Hardwoods														
Soft maple	20	--	2	23	--	--	3	1	--	7	10	23	9	33
Hickory	2	--	1	2	0	--	0	--	--	1	1	2	1	3
Hackberry	1	--	0	1	--	--	0	0	--	0	1	1	1	2
Ash	5	--	2	7	0	--	0	--	--	2	2	5	4	9
Honeylocust	0	--	0	1	0	--	0	--	--	0	0	0	0	1
Black walnut	93	--	9	102	2	--	3	--	13	28	46	111	37	149
Cottonwood	3,228	--	487	3,715	--	--	--	--	--	1,051	1,051	3,013	1,506	4,519
Red oak	47	3	15	64	0	--	24	--	--	19	43	73	34	107
White oak	23	1	8	32	0	--	12	--	--	9	22	37	17	54
Basswood	2	--	0	3	--	--	0	0	--	1	1	3	1	4
Elm	2	--	0	2	--	--	0	0	--	1	1	3	1	4
Other hardwoods	0	--	0	0	--	--	0	0	--	0	0	0	0	0
Total	3,424	4	525	3,952	2	--	43	1	13	1,193	1,253	3,487	1,718	5,205
All species	3,635	24	545	4,204	2	--	43	1	13	1,202	1,261	3,719	1,747	5,465

WESTERN UNIT

Species group	Growing stock				Non-growing stock							Total material used for products	Total material not used	Total material harvested
	Used for products		Logging residue (not) used)	Total	Used for products					Logging slash (not) used)	Total			
	Sawtimber	Poletimber			Limbwood	Saplings	Cull trees	Dead trees	Nonforest trees					
Softwoods														
Redcedar	77	5	5	87	--	0	0	0	--	11	11	83	16	98
Ponderosa pine	1,606	--	172	1,779	--	--	2	--	--	249	251	1,691	421	2,030
Total	1,684	5	178	1,867	--	0	2	0	--	260	262	1,774	437	2,128
Hardwoods														
Soft maple	1	--	0	1	--	--	0	0	--	0	0	1	0	1
Hackberry	0	--	0	0	--	--	0	0	--	0	0	0	0	1
Ash	6	--	3	9	0	--	1	--	--	2	3	7	5	12
Black walnut	1	--	0	1	0	--	0	--	0	0	0	1	0	1
Cottonwood	253	--	38	291	--	--	--	--	--	88	88	253	126	379
White oak	1	0	0	1	0	--	0	--	--	0	1	1	1	2
Elm	2	--	0	3	--	--	0	0	--	1	1	3	1	4
Total	264	0	41	305	0	--	1	0	0	92	94	266	134	399
All species	1,948	5	218	2,172	0	0	3	0	0	352	356	1,957	571	2,528

[1] *International 1/4-inch rule.*

Value of "0" indicates value greater than 0 but less than 500.
Rows and columns may not sum due to rounding.

Table 8.--Harvest residues generated by industrial roundwood harvesting from timberland by Forest Survey Unit, county, and species group, Nebraska, 2000

(In thousand cubic feet)

Unit and county	Red cedar	Ponderosa pine	Total softwoods	Soft maple	Hickory	Hackberry	Ash	Honey-locust	Black walnut	Sycamore	Cotton-wood	Red oak	White oak	Bass-wood	Elm	Other hardwoods	Total hardwoods	All species
Eastern																		
Boone	--	--	--	0	--	--	--	--	7	--	2	--	--	--	--	--	8	8
Buffalo	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--	17	17
Burt	--	--	--	--	--	--	--	--	0	--	57	--	0	--	--	--	57	57
Butler	4	--	4	--	--	--	--	--	0	--	15	--	0	--	--	--	15	19
Cass	--	--	--	--	--	--	--	--	0	--	53	--	--	--	--	--	54	54
Cedar	0	--	0	--	--	--	--	--	0	--	37	2	--	--	--	--	40	40
Colfax	--	--	--	--	--	--	--	--	--	--	79	--	--	--	--	--	79	79
Cuming	--	--	--	--	--	--	--	--	1	--	110	--	--	--	--	--	111	111
Custer	0	--	0	--	--	--	--	--	--	--	15	--	--	--	--	--	15	15
Dakota	--	--	--	--	--	--	--	--	--	--	111	--	--	--	--	--	111	111
Dawson	--	--	--	--	--	--	--	--	--	--	101	--	--	--	--	--	101	101
Dixon	--	--	--	--	--	--	--	--	--	--	43	--	--	--	--	--	43	43
Dodge	--	--	--	--	--	--	--	--	0	--	82	0	0	--	--	--	82	82
Douglas	0	--	0	--	--	--	3	--	4	--	15	--	2	--	--	--	23	23
Franklin	--	--	--	--	--	--	--	--	--	--	56	--	--	--	--	--	56	56
Furnas	--	--	--	--	--	--	--	--	--	--	56	--	--	--	--	--	56	56
Gage	--	--	--	6	--	--	--	--	4	--	10	--	--	--	--	--	20	20
Greeley	3	--	3	--	--	--	--	--	--	--	0	--	--	--	0	--	0	3
Hall	--	--	--	--	--	--	--	--	0	--	--	--	1	--	--	--	1	1
Howard	4	--	4	--	--	--	--	--	0	--	0	--	--	--	--	--	0	4
Johnson	--	--	--	--	--	--	--	--	2	--	4	--	4	--	--	--	10	10
Kearney	--	--	--	--	--	--	--	--	--	--	15	--	--	--	--	--	15	15
Lancaster	0	--	0	1	--	--	--	--	1	--	4	0	--	--	0	--	6	6
Madison	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--	40	40
Merrick	5	--	5	--	--	--	--	0	--	--	27	--	--	--	--	--	27	32
Nance	4	0	4	0	--	0	1	--	0	0	40	0	1	--	0	--	44	48
Nemaha	0	--	0	--	--	--	--	--	1	--	--	3	--	--	--	--	5	5
Otoe	0	--	0	0	--	--	--	--	4	--	--	0	0	--	0	--	4	5
Pawnee	--	--	--	--	--	--	--	--	--	--	4	--	4	--	--	--	8	8
Phelps	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--	17	17
Pierce	--	--	--	--	--	--	--	--	--	--	23	--	--	--	--	--	23	23
Platte	4	0	4	--	--	--	0	--	--	--	79	0	--	--	0	--	79	83
Polk	0	--	0	0	--	0	0	--	0	--	68	0	--	--	0	--	68	69
Red Willow	--	--	--	--	--	--	--	--	--	--	17	--	--	--	--	--	17	17
Richardson	0	--	0	1	1	0	--	--	11	--	5	27	4	1	--	--	51	51
Saline	--	--	--	1	--	--	--	--	--	--	6	--	--	--	--	--	7	7
Saunders	--	--	--	--	--	--	--	--	--	--	184	--	--	--	--	--	184	184
Seward	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	0
Stanton	--	--	--	--	--	--	--	--	--	--	116	--	--	--	--	--	116	116
Thurston	--	--	--	--	--	--	--	--	2	--	60	--	1	--	--	--	62	62
Valley	3	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
Washington	0	--	0	0	--	0	0	--	0	--	25	--	0	--	--	--	26	26
Wayne	--	--	--	--	--	--	--	--	--	--	43	--	--	--	--	--	43	43
Webster	--	--	--	--	--	--	0	--	0	--	18	--	--	--	0	0	19	19
York	0	--	0	--	--	--	--	--	--	--	--	--	0	--	--	--	0	0
Total	28	0	29	9	1	1	4	0	37	0	1,613	34	17	1	1	0	1,718	1,746

Western																		
Antelope	--	--	--	0	--	0	3	--	--	--	60	--	--	--	0	--	64	64
Arthur	0	--	0	--	--	--	1	--	--	--	16	--	--	--	0	--	17	17
Boyd	--	--	--	--	--	--	--	--	0	--	--	--	--	--	--	--	0	0
Brown	5	0	5	0	--	--	0	--	--	--	--	--	0	--	--	--	0	5
Chase	--	--	--	--	--	--	--	--	--	--	21	--	--	--	--	--	21	21
Cherry	0	0	0	--	--	--	0	--	--	--	--	--	0	--	--	--	0	1
Dawes	--	353	353	--	--	--	--	--	--	--	--	--	--	--	--	--	--	353
Garfield	3	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
Keya Paha	3	4	6	--	--	--	0	--	--	--	--	--	0	--	--	--	1	7
Knox	--	--	--	--	--	--	--	--	--	--	13	--	--	--	--	--	13	13
Lincoln	0	--	0	--	--	--	--	--	--	--	15	--	--	--	--	--	15	15
Loup	1	--	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1
McPherson	0	--	0	--	--	--	1	--	--	--	1	--	--	--	0	--	2	2
Rock	0	0	0	--	--	--	0	--	--	--	--	--	0	--	--	--	0	0
Sheridan	--	4	4	--	--	--	--	--	--	--	--	--	--	--	--	--	--	4
Sioux	--	60	60	--	--	--	--	--	--	--	--	--	--	--	--	--	--	60
Wheeler	3	--	3	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3
Total	16	421	437	0	--	0	5	--	0	--	126	--	0	--	1	--	134	571
All species	44	422	466	10	1	1	9	0	37	0	1,739	34	17	1	2	0	1,744	2,317

Value of "0" indicates value greater than 0 but less than 500.
Rows and columns may not sum due to rounding.

Table 9.--Growing-stock removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Nebraska, 2000

(In thousand cubic feet)

Unit and county	Red cedar	Ponderosa pine	Total softwoods	Soft maple	Hickory	Hackberry	Ash	Honey-locust	Black walnut	Sycamore	Cotton-wood	Red oak	White oak	Bass-wood	Elm	Other hardwoods	Total hardwoods	All species
Eastern Unit																		
Boone	--	--	--	0	--	--	--	--	18	--	4	--	--	--	--	--	22	22
Buffalo	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--	40	40
Burt	--	--	--	--	--	--	--	--	0	--	132	--	0	--	--	--	132	132
Butler	37	--	37	--	--	--	--	--	0	--	34	--	0	--	--	--	34	71
Cass	--	--	--	--	--	--	--	--	1	--	123	--	0	--	--	--	124	124
Cedar	0	--	0	--	--	--	--	--	0	--	86	4	--	--	--	--	91	91
Colfax	--	--	--	--	--	--	--	--	--	--	181	--	--	--	--	--	181	181
Cuming	--	--	--	--	--	--	--	--	2	--	254	--	--	--	--	--	256	256
Custer	0	--	0	--	--	--	--	--	--	--	35	--	--	--	--	--	35	35
Dakota	--	--	--	--	--	--	--	--	--	--	255	--	--	--	--	--	255	255
Dawson	--	--	--	--	--	--	--	--	--	--	233	--	--	--	--	--	233	233
Dixon	--	--	--	--	--	--	--	--	--	--	98	--	--	--	--	--	98	98
Dodge	--	--	--	--	--	--	--	--	0	--	188	0	0	--	--	--	188	188
Douglas	0	--	0	--	--	--	4	--	9	--	34	--	3	--	25	--	51	52
Franklin	--	--	--	--	--	--	--	--	--	--	128	--	--	--	--	--	128	128
Furnas	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--	40	40
Gage	--	--	--	15	--	--	--	--	12	--	22	--	--	--	--	--	49	49
Greeley	30	--	30	--	--	--	--	--	--	--	0	--	--	--	0	--	0	31
Hall	--	--	--	--	--	--	--	--	1	--	--	--	1	--	--	--	2	2
Howard	37	--	37	--	--	--	--	--	1	--	0	--	--	--	--	--	1	37
Johnson	--	--	--	--	--	--	--	--	4	--	9	--	8	--	--	--	21	21
Kearney	--	--	--	--	--	--	--	--	--	--	35	--	--	--	--	--	35	35
Lancaster	1	--	1	2	--	--	--	--	2	--	9	1	--	--	1	--	14	14
Madison	--	--	--	--	--	--	--	--	--	--	92	--	--	--	--	--	92	92
Merrick	39	--	39	--	--	--	--	1	--	--	62	--	--	--	--	--	62	101
Nance	38	1	39	0	--	0	2	--	1	0	93	0	3	--	1	--	100	138
Nemaha	1	--	1	--	--	--	--	--	3	--	--	6	--	--	--	--	10	11
Otoe	0	--	0	0	--	--	--	--	11	--	--	1	0	--	0	--	12	12
Pawnee	--	--	--	--	--	--	--	--	--	--	9	--	8	--	--	--	17	17
Phelps	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--	40	40
Pierce	--	--	--	--	--	--	--	--	--	--	53	--	--	--	--	--	53	53
Platte	37	0	37	--	--	--	0	--	--	--	181	0	--	--	0	--	182	218
Polk	1	--	1	0	--	0	0	--	0	--	157	0	--	--	0	--	157	158
Red Willow	--	--	--	--	--	--	--	--	--	--	40	--	--	--	--	--	40	40
Richardson	0	--	0	3	2	1	--	--	31	--	11	52	8	3	--	--	109	110
Saline	--	--	--	2	--	--	--	--	--	--	13	--	--	--	--	--	16	16
Sarpy	--	--	--	--	--	--	--	--	--	--	--	--	--	--	3	3	6	6
Saunders	--	--	--	--	--	--	--	--	--	--	423	--	--	--	--	--	423	423
Seward	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	0
Stanton	--	--	--	--	--	--	--	--	--	--	266	--	--	--	--	--	266	266
Thurston	--	--	--	--	--	--	--	--	4	--	138	--	1	--	--	--	144	144
Valley	30	--	30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30
Washington	0	--	0	0	--	0	0	--	0	--	59	--	0	--	--	--	59	60
Wayne	--	--	--	--	--	--	--	--	--	--	98	--	--	--	--	--	98	98
Webster	--	--	--	--	--	--	0	--	0	--	42	--	--	--	0	0	43	43
York	0	--	0	--	--	--	--	--	--	--	--	--	0	--	--	--	0	0
Total	251	1	252	22	2	1	7	1	102	0	3,715	64	32	3	2	0	3,952	4,204

Western Unit																		
Antelope	--	--	--	1	--	0	6	--	--	--	138	--	--	--	0	--	146	146
Arthur	1	--	1	--	--	--	1	--	--	--	36	--	--	--	1	--	39	40
Boyd	--	--	--	--	--	--	--	--	1	--	--	--	--	--	--	--	1	1
Brown	13	2	15	0	--	--	0	--	--	--	--	--	0	--	--	--	0	15
Chase	--	--	--	--	--	--	--	--	--	--	49	--	--	--	--	--	49	49
Cherry	1	0	2	--	--	--	0	--	--	--	--	--	0	--	--	--	0	2
Dawes	--	1,490	1,490	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,490
Garfield	30	--	30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30
Keya Paha	7	15	22	--	--	--	0	--	--	--	--	--	1	--	--	--	1	24
Knox	--	--	--	--	--	--	--	--	--	--	31	--	--	--	--	--	31	31
Lincoln	0	--	0	--	--	--	--	--	--	--	35	--	--	--	--	--	35	35
Loup	2	--	2	--	--	--	--	--	--	--	--	--	--	--	--	--	--	2
McPherson	1	--	1	--	--	--	1	--	--	--	1	--	--	--	1	--	4	5
Rock	1	0	1	--	--	--	0	--	--	--	--	--	0	--	--	--	0	1
Sheridan	--	16	16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	16
Sioux	--	255	255	--	--	--	--	--	--	--	--	--	--	--	--	--	--	255
Wheeler	30	--	30	--	--	--	--	--	--	--	--	--	--	--	--	--	--	30
Total	87	1,779	1,866	1	--	0	9	--	1	--	291	--	1	--	3	--	305	2,172
State total	339	1,780	2,118	23	2	2	15	1	103	0	4,006	64	33	3	5	0	4,258	6,376

Value of "0" indicates value greater than 0 but less than 500.
Rows and columns may not sum due to rounding.

Table 10.--Sawtimber removals from timberland for industrial roundwood production by Forest Survey Unit, county, and species group, Nebraska, 2000

(In thousand board feet)

Unit and county	Red cedar	Ponderosa pine	Total softwoods	Soft maple	Hickory	Hackberry	Honey-locust	Ash	Black walnut	Sycamore	Cotton-wood	Red oak	White oak	Bass-wood	Elm	Other hardwoods	Total hardwoods	All species
Eastern Unit																		
Boone	--	--	--	2	--	--	--	--	113	--	22	--	--	--	--	--	137	137
Buffalo	--	--	--	--	--	--	--	--	--	--	234	--	--	--	--	--	234	234
Burt	--	--	--	--	--	--	--	--	1	--	780	--	0	--	--	--	780	780
Butler	195	--	195	--	--	--	--	--	1	--	201	--	0	--	--	--	202	397
Cass	--	--	--	--	--	--	--	--	8	--	723	--	--	--	--	--	731	731
Cedar	1	--	1	--	--	--	--	--	3	--	506	16	--	--	--	--	526	527
Colfax	--	--	--	--	--	--	--	--	--	--	1,069	--	--	--	--	--	1,069	1,069
Cuming	--	--	--	--	--	--	--	--	13	--	1,500	--	--	--	--	--	1,514	1,514
Custer	1	--	1	--	--	--	--	--	--	--	207	--	--	--	--	--	207	208
Dakota	--	--	--	--	--	--	--	--	--	--	1,502	--	--	--	--	--	1,502	1,502
Dawson	--	--	--	--	--	--	--	--	--	--	1,376	--	--	--	--	--	1,376	1,376
Dixon	--	--	--	--	--	--	--	--	--	--	578	--	--	--	--	--	578	578
Dodge	--	--	--	--	--	--	--	--	1	--	1,108	1	0	--	--	--	1,109	1,109
Douglas	1	--	1	--	--	--	--	22	70	--	194	--	12	--	--	--	298	299
Franklin	--	--	--	--	--	--	--	--	--	--	754	--	--	--	--	--	754	754
Furnas	--	--	--	--	--	--	--	--	--	--	234	--	--	--	--	--	234	234
Gage	--	--	--	89	--	--	--	--	75	--	131	--	--	--	--	--	295	295
Greeley	162	--	162	--	--	--	--	--	--	--	2	--	--	--	1	--	2	165
Hall	--	--	--	--	--	--	--	--	3	--	--	--	4	--	--	--	7	7
Howard	195	--	195	--	--	--	--	--	3	--	2	--	--	--	--	--	5	200
Johnson	--	--	--	--	--	--	--	--	28	--	52	--	30	--	--	--	110	110
Kearney	--	--	--	--	--	--	--	--	--	--	207	--	--	--	--	--	207	207
Lancaster	3	--	3	9	--	--	--	--	14	--	52	3	--	--	3	--	81	84
Madison	--	--	--	--	--	--	--	--	--	--	544	--	--	--	--	--	544	544
Merrick	205	--	205	--	--	--	3	--	--	--	365	--	--	--	--	--	367	572
Nance	200	3	203	1	--	2	--	8	7	--	547	1	10	--	5	--	582	785
Nemaha	6	--	6	--	--	--	--	--	22	--	--	24	--	--	--	--	45	51
Otoe	2	--	2	0	--	--	--	--	66	--	--	2	1	--	2	--	72	74
Pawnee	--	--	--	--	--	--	--	--	--	--	52	--	30	--	--	--	82	82
Phelps	--	--	--	--	--	--	--	--	--	--	234	--	--	--	--	--	234	234
Pierce	--	--	--	--	--	--	--	--	--	--	310	--	--	--	--	--	310	310
Platte	195	0	195	--	--	--	--	0	--	--	1,069	0	--	--	2	--	1,071	1,266
Polk	5	--	5	0	--	0	--	1	1	--	925	0	--	--	1	--	928	933
Red Willow	--	--	--	--	--	--	--	--	--	--	234	--	--	--	--	--	234	234
Richardson	1	--	1	15	12	4	--	--	193	--	64	197	30	15	--	--	529	530
Saline	--	--	--	13	--	--	--	--	--	--	79	--	--	--	--	--	92	92
Saunders	--	--	--	--	--	--	--	--	--	--	2,496	--	--	--	--	--	2,496	2,496
Seward	--	--	--	--	--	--	--	--	--	--	--	--	0	--	--	--	0	0
Stanton	--	--	--	--	--	--	--	--	--	--	1,570	--	--	--	--	--	1,570	1,570
Thurston	--	--	--	--	--	--	--	--	27	--	816	--	4	--	--	--	847	847
Valley	162	--	162	--	--	--	--	--	--	--	--	--	--	--	--	--	--	162
Washington	0	--	0	0	--	0	--	1	2	--	346	--	1	--	--	--	350	351
Wayne	--	--	--	--	--	--	--	--	--	--	578	--	--	--	--	--	578	578
Webster	--	--	--	--	--	--	--	0	0	--	250	--	--	--	0	0	251	251
York	1	--	1	--	--	--	--	--	--	--	--	--	0	--	--	--	0	1
Total	1,335	3	1,338	131	12	8	3	32	643	--	21,918	244	123	15	14	0	23,143	24,481

Western Unit																			
Antelope	--	--	--	5	--	2	--	29	--	--	816	--	--	--	2	--	855	855
Arthur	5	--	5	--	--	--	--	5	--	--	215	--	--	--	7	--	227	232
Boyd	--	--	--	--	--	--	--	--	4	--	--	--	--	--	--	--	4	4
Brown	58	10	68	1	--	--	--	0	--	--	--	--	0	--	--	--	1	69
Chase	--	--	--	--	--	--	--	--	--	--	289	--	--	--	--	--	289	289
Cherry	5	2	7	--	--	--	--	0	--	--	--	--	0	--	--	--	0	7
Dawes	--	7,952	7,952	--	--	--	--	--	--	--	--	--	--	--	--	--	--	7,952
Garfield	162	--	162	--	--	--	--	--	--	--	--	--	--	--	--	--	--	162
Keya Paha	33	80	113	--	--	--	--	2	--	--	--	--	3	--	--	--	5	118
Knox	--	--	--	--	--	--	--	--	--	--	180	--	--	--	--	--	180	180
Lincoln	0	--	0	--	--	--	--	--	--	--	207	--	--	--	--	--	207	208
Loup	10	--	10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	10
McPherson	5	--	5	--	--	--	--	5	--	--	8	--	--	--	7	--	20	25
Rock	3	1	4	--	--	--	--	0	--	--	--	--	0	--	--	--	0	4
Sheridan	--	86	86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	86
Sioux	--	1,363	1,363	--	--	--	--	--	--	--	--	--	--	--	--	--	--	1,363
Wheeler	162	--	162	--	--	--	--	--	--	--	--	--	--	--	--	--	--	162
Total	443	9,494	9,973	6	--	2	--	42	4	--	1,716	--	4	--	16	--	1,790	11,727
State total	1,778	9,497	11,275	137	12	10	3	74	647	0	23,634	244	126	15	30	0	24,933	36,208

Value of "0" indicates value greater than 0 but less than 500.
Rows and columns may not sum due to rounding.

Table 11.--Residues produced at primary wood-using mills by type of material, type of use, and Forest Survey Unit, Nebraska, 2000

(In thousand tons, green weight)

Survey Unit and type of use	Wood residues							
	Total		Coarse [1]		Fine [2]		Bark	
	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood	Softwood	Hardwood
Eastern Unit								
Industrial fuel-mill	1.38	--	--	--	1.38	--	--	--
Industrial fuel-sold	--	5.35	--	5.35	--	--	--	0.99
Domestic fuel	0.03	0.30	0.03	0.30	--	--	0.01	0.11
Miscellaneous [3]	0.03	41.88	0.01	25.91	0.02	15.97	0.00	10.59
Not used	0.03	6.37	0.02	4.04	0.01	2.33	0.01	1.67
Total	1.46	53.89	0.05	35.59	1.41	18.30	0.01	13.36
Western Unit								
Fiber products	0.00	--	0.00	--	--	--	0.00	--
Industrial fuel-mill	0.05	0.01	0.05	0.01	--	--	0.02	0.01
Domestic fuel	0.63	1.73	0.63	1.73	--	--	0.26	0.74
Miscellaneous [3]	0.55	0.99	0.16	--	0.38	0.99	0.01	--
Not used	0.13	0.03	0.05	--	0.08	0.03	--	--
Total	1.36	2.76	0.89	1.75	0.47	1.02	0.28	0.74
All Units								
Fiber products	0.00	--	0.00	--	--	--	0.00	--
Industrial fuel-mill	1.43	0.01	0.05	0.01	1.38	--	0.02	0.01
Industrial fuel-sold	--	5.35	--	5.35	--	--	--	0.99
Domestic fuel	0.65	2.03	0.65	2.03	--	--	0.27	0.84
Miscellaneous [3]	0.58	42.86	0.17	25.91	0.40	16.96	0.01	10.59
Not used	0.16	6.40	0.07	4.04	0.10	2.36	0.01	1.67
Total	2.82	56.66	0.94	37.34	1.88	19.32	0.30	14.10

[1] *Suitable for chipping such as slabs, edgings, veneer cores, etc.*

[2] *Not suitable for chipping such as sawdust, veneer clippings, etc.*

[3] *Livestock bedding, mulch, small dimension, and specialty items.*

Value of "0" indicates value greater than 0 but less than 500.
Rows and columns may not sum due to rounding.

Mission Statement

We believe the good life has its roots in clean air, sparkling water, rich soil, healthy economies and a diverse living landscape. Maintaining the good life for generations to come begins with everyday choices about natural resources. The North Central Research Station provides the knowledge and the tools to help people make informed choices. That's how the science we do enhances the quality of people's lives.

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Reading, William H., IV; Adams, Dennis M.

2002. **Nebraska timber industry—an assessment of timber product output and use, 2000.** Resour. Bull. NC-208. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Research Station. 32 p.

Discusses recent Nebraska forest industry trends; and production and receipts of industrial roundwood by product, species, and county in 2000. Reports on logging residue, on wood and bark residue generated at primary wood-using mills, and on disposition of mill residues.

KEY WORDS: Industrial roundwood, production residues, saw logs, veneer logs

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